

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
23 August 2001 (23.08.2001)

PCT

(10) International Publication Number  
WO 01/60660 A1

(51) International Patent Classification<sup>7</sup>: B60R 9/045,  
9/048, 9/052, 9/08, E05B 73/00, B63B 35/79, 35/85

(81) Designated States (*national*): BR, CR, ID, JP, MX, NZ,  
US, ZA.

(21) International Application Number: PCT/AU01/00022

(84) Designated States (*regional*): European patent (AT, BE,  
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE, TR).

(22) International Filing Date: 12 January 2001 (12.01.2001)

(25) Filing Language:

English

Published:

— with international search report

(26) Publication Language:

English

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(30) Priority Data:

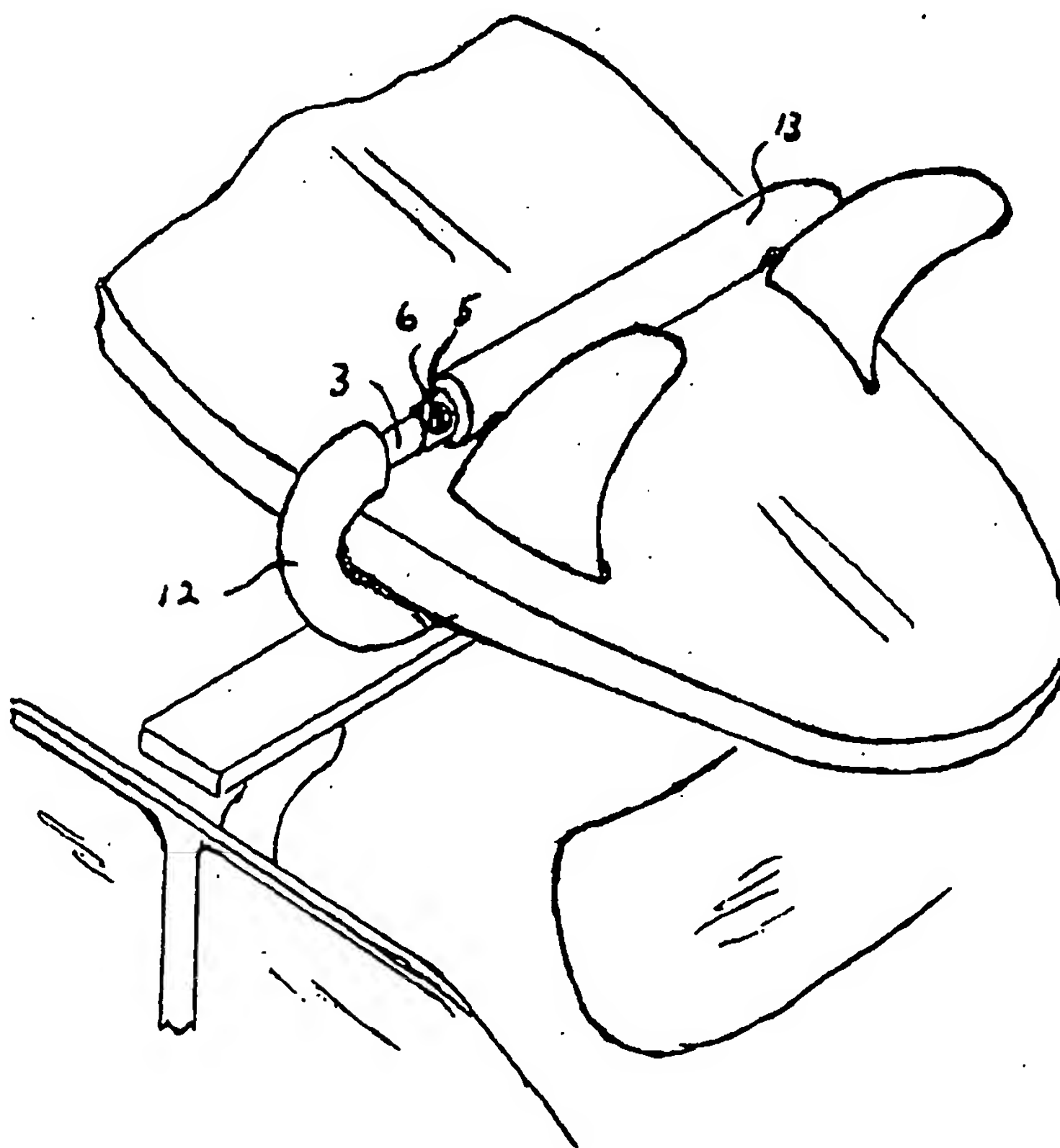
PQ 5629

16 February 2000 (16.02.2000) AU

(71) Applicant and

(72) Inventor: SPRY, Mark, Arthur [AU/AU]; 102 Terrance  
Avenue, Lake Munmorah, NSW 2259 (AU).

(54) Title: SURFBOARD SECURITY LOCKING SYSTEM



(57) Abstract: A surfboard security locking system which provides a secure environment for the transportation of surfboards on vehicle roof racks. The surfboard security locking system comprises primarily of two elongated U-shape brackets which include padded covers (12, 13, respectively) and locking inserts (3). One bracket is permanently attached to the top of the roof rack. This ensures the surfboard security locking system cannot be removed when carrying surfboard. In this way the risk of theft is greatly reduced. To transport the surfboard, it is laid in the fixed bracket section, the detachable bracket slides around the surfboard and that bracket is locked in place. The bracket adjusts to fit any size surfboard. The surfboard security locking system is locked into place by fixed key locks on either bracket. An upper fixed key lock (5) is attached to the front side of the flared upper end (6). The fixed nature of this key locking system greatly reduces the risk of theft of the surfboard.

WO 01/60660 A1

## SURFBOARD SECURITY LOCKING SYSTEM

This invention relates to an improved surfboard security locking system.

The transportation of surfboards causes problems for the surfboard transporter. Surfboards often have to be chained or strapped to the roof racks of a vehicle causing damage to the vehicle and the surfboard, and allowing easy theft of the surfboard. Existing surfboard security locking systems are designed in such a manner that the locking mechanism is easily accessible, as is the roof rack attachment mechanism. This means that "would-be" thieves have easy access to the locking and attachment mechanisms.

As the locking mechanisms used tend to be of the padlock and cable type, they are easily accessible and open to tampering. As the cable and padlock are separate items to the locking system they can be lost, leaving the system inoperable. Further, the method of attachment of existing surfboard security locking systems is a cable, there tends to be movement of the surfboard as the cable can shift its position depending on the speed of the vehicle. The cable can potentially also cause damage to the roof racks of the vehicle, the vehicle itself and the surfboard.

It is an object of the present invention to provide a secure environment for the transportation of surfboards on vehicle roof racks, which is accomplished in the following manner:

The improved surfboard security locking system is comprised primarily of two elongated U-shape brackets. One bracket is permanently attached to the top of the roof rack by means of fully concealed self-tapping screws or the like. This ensures the surfboard security locking system cannot be removed when carrying a surfboard. In this way the risk of theft is greatly reduced. To transport the surfboard, it is laid in the fixed bracket section, the detachable bracket slides around the surfboard and that bracket is locked in place. The bracket adjusts to fit any size surfboard.

The surfboard security locking system is locked into place by fixed key locks on either bracket. The fixed nature of these key locks prevents the lock being removed from the surfboard security locking system greatly reducing the risk of theft of the surfboard. In addition, it would be difficult to tamper with the lower fixed key lock as it is located underneath the surfboard

when in position and the surfboard security locking system cannot be removed without both the upper and lower locks being unlocked.

The brackets have padded protective covers to ensure the surfboard is undamaged by the surfboard security locking system.

- 5 With the above and additional objects and advantages in view, as set out below, this invention comprises the devices, combinations and arrangements of parts described below by way of example and illustrated in the accompanying drawings of a preferred embodiment. It is to be understood the features illustrated in and described with reference to the  
10 drawings are not to be construed as limiting on the scope of the invention.

In the drawings:

Figure 1 is a front view of the left attachment bracket;

Figure 2 is a front view of the right attachment bracket;

Figure 3 is an end view of the left attachment bracket;

- 15 Figure 4 is an end view of the right attachment bracket;

Figure 5 is a top view of the left attachment bracket;

Figure 6 is a bottom view of the left attachment bracket;

Figure 7 is a front view of the assembled security locking system;

- 20 Figure 8 is a dissected, perspective view of the left attachment bracket attached to the roof rack of a vehicle; and

Figure 9 is a perspective view of the assembled security locking system in place around a surfboard on top of a vehicle.

In the various figures of the drawings, like reference characters designate like parts.

- 25 The surfboard security locking system is comprised of two primarily U-shaped brackets. The left-side bracket is comprised of a lower attachment sleeve 1. The lower attachment sleeve 1 has an internal square channel 16 which allows the lower locking insert 8 to slide into the lower attachment sleeve 1. The lower attachment sleeve 1 is attached to the roof rack of a

vehicle by inserting self-tapping screws 14 and 15, or the like, through the tool insertion holes 10 and through the attachment holes 11 into the roof rack.

5 A lower fixed key lock 2 is attached to the inner, front edge of the lower attachment sleeve 1. The lower fixed key lock 2 is used to lock the right-side bracket into the left-side bracket at the bottom of the surfboard security locking system. An upper circular, U-shaped locking insert 3 is attached to the end of the lower attachment sleeve 1. The upper U-shaped locking insert 3 has a series of upper locking holes 4 along the upper, front side. These  
10 upper locking holes 4 are used for locking the left-side bracket inside the right-side bracket to the width of the surfboard.

The right-side bracket is comprised of a U-shaped locking sleeve 7. The U-shaped locking sleeve 7 has a flared upper end 6. An upper fixed key lock 5  
15 lock 5 is used to lock the left-side bracket into the right-side bracket at the top of the surfboard security locking system. A lower locking insert 8 is attached to the lower end of the U-shaped locking sleeve 7. The lower locking insert 8 has an internal U-shaped channel 17. This allows the lower locking insert 8 to slide into the lower attachment sleeve 1 over the self-  
20 tapping screws 14 and 15. The lower locking insert 8 has a series of lower locking holes 9 along the front side. These lower locking holes 9 are used for locking the right-side bracket inside the left-side bracket to the width of the surfboard.

Protective padded covers 12 and 13 slide over the right-side of the upper U-  
25 shaped locking insert 3 of the left-side bracket and the upper locking sleeve 6 and the arc-shaped holding tube 7 of the right-side bracket to protect the surfboard when in operation.

Once the left-side bracket has been attached to the roof rack of a vehicle, the surfboard slides into place inside the left-side bracket. The lower locking  
30 insert 8 slides into the lower attachment sleeve 1 over the self-tapping screws 14 and 15, and the upper U-shaped locking insert 3 slides into the upper locking sleeve 6. When in place around the surfboard, the upper and lower key locks 5 and 2 are then locked.

Numerous alterations of the structures discussed will suggest themselves to  
35 those skilled in the art. However, it is to be understood that the present

disclosure relates to preferred embodiments of the invention which are for the purpose of illustration only, and are not to be construed as a limitation of the invention.

The claim defining the invention is as follows :

1. A Surfboard Security Locking System comprising:  
  
A left-side and right-side bracket;  
  
said left-side and right-side brackets having protective padded covers;  
  
5 said left-side bracket having a lower attachment sleeve;  
  
said lower attachment sleeve having a fixed lock;  
  
said lower attachment sleeve having a set of tool insertion holes and attachment holes;  
  
said lower attachment sleeve having attached an upper U-shaped locking  
10 insert;  
  
said upper U-shaped locking insert having a series of locking holes;  
  
said right-side bracket having a flared upper locking sleeve;  
  
said flared upper locking sleeve having a fixed lock;  
  
said flared upper locking sleeve having attached a lower U-shaped locking  
15 insert;  
  
said lower U-shaped locking insert having a series of locking holes.
2. A Surfboard Security Locking System according to claim 1 in which any portion of the body is fabricated from plastic.
3. A Surfboard Security Locking System according to claim 1 in which  
20 any portion of the body is fabricated from aluminum.
4. A Surfboard Security Locking System according to claim 1 in which any portion of the body is fabricated from steel.
5. A Surfboard Security Locking System according to claim 1 in which any part is joined to another part by welding.
- 25 6. A Surfboard Security Locking System according to claim 1 in which any part is joined to another part by bolts and nuts.

7. A Surfboard Security Locking System according to claim 1 in which any part is joined to another part by injection molding.
8. A Surfboard Security Locking System, said device being substantially as described with reference to the accompanying drawings.

1/3

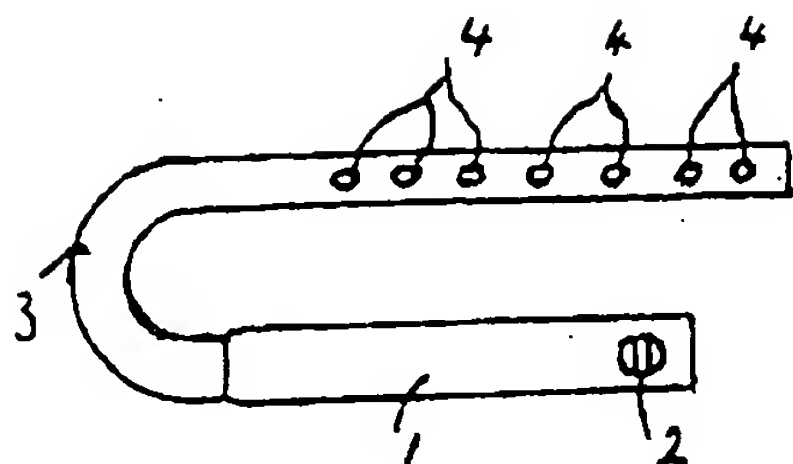


Fig. 1

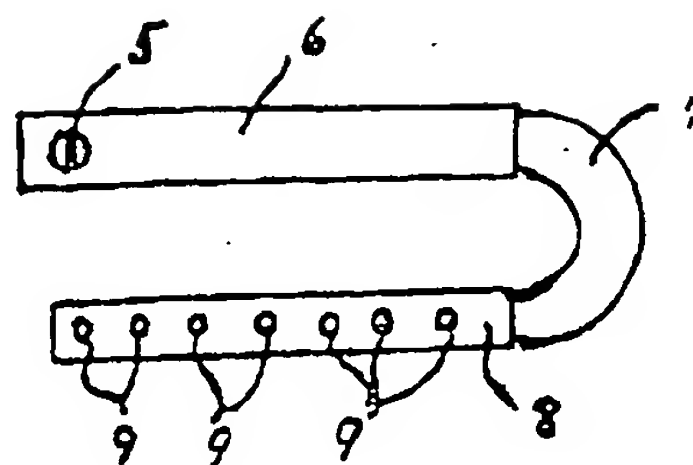


Fig. 2

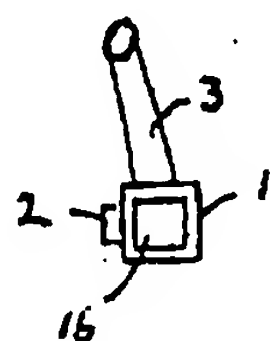


Fig. 3

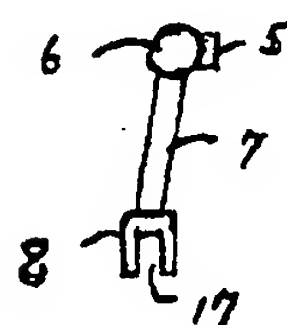


Fig. 4

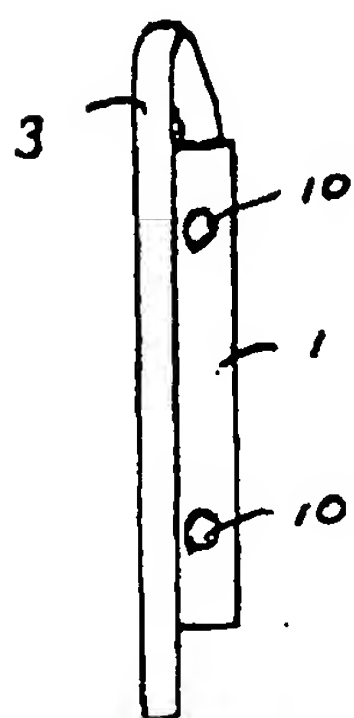


Fig. 5

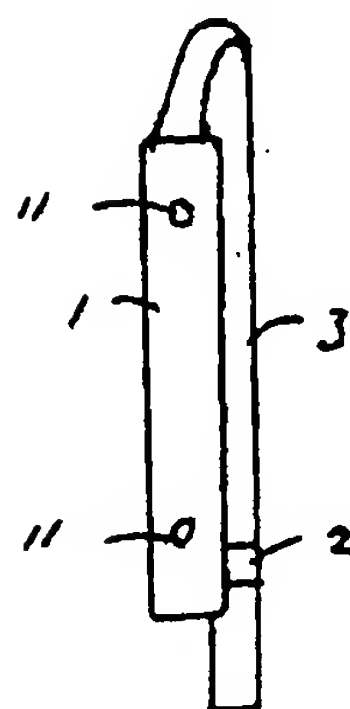


Fig. 6





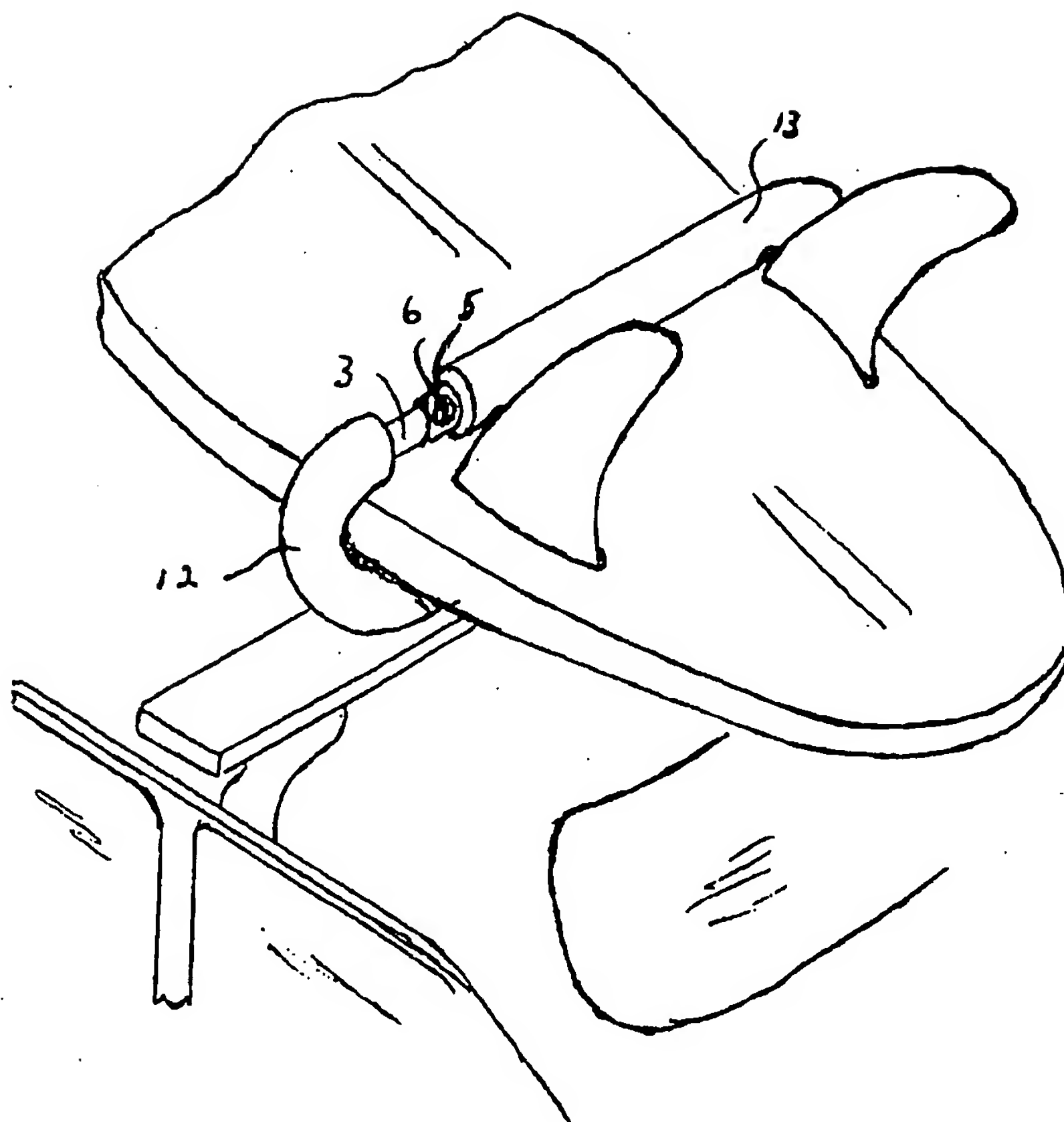


Fig. 9